SPONTANEOUS NECK HEMATOMA

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Spontaneous hematoma in neck is uncommon. Rupture of inferior thyroid artery is seen in majority of cases. We are presenting a case of 72 years old male who presented in emergency with acute onset of progressive neck swelling. CT scan of neck and upper mediastinum was advised. Emergency neck exploration, evacuation of hematoma and ligation of inferior thyroid artery was done. No further bleeding occurred.

Key words: neck, spontaneous hematoma, exploration

INTRODUCTION:

Neck hematoma is common due to trauma both surgical and nonsurgical. Spontaneous neck hematoma is rare. Tumor bleeding, dissected aneurysm of neck vessels, bleeding and clotting disorders are possible etiologies of spontaneous neck hematoma. It presents as neck swelling with life threatening condition due to both vascular and airway compromise leading to cerebral hypoxia.[1] Esophageal compression, endolaryngeal and subcutaneous bruises are other presentation.[2]

CASE REPORT:

A 72 year old male, hailing from Nawalparasi presented in emergency department of this institute with complain of progressive swelling of neck starting 4 hours before arrival. He felt discomfort in left side of neck with gradually increasing fullness in the same area. He denied any history of trauma, surgery, upper respiratory tract infection, previous swelling, foreign body ingestion, bleeding disorder, repeated valsalva and other medical illness. At the time of triage, vitals were stable without stridor. On examination, there was a diffuse swelling in the neck involving all triangles, more on left side. It was painless, firm, nonfluctuant. Great vessels could not be palpated on both sides over the swelling (Fig1).

Fig.1: Showing neck hematoma

Fig .2: X-ray showing trachea shift to right

Immediate ultrasound scan showed a huge, inhomogeneous mass adjacent to the thyroid lobes with diffuse enlargement of sternocleidomastoid muscles. Emergency CT scan of neck and upper mediastinum revealed hematoma like lesion in all triangles of neck both sides, compression of left thyroid lobe with parapharyngeal and retropharyngeal extension in left side, lateralization of trachea to right side (Fig 2,3,4). Carotid artery and jugular veins were intact. No mediastinal extension was seen.

Fig. 3: CT scan showing extension of hematoma

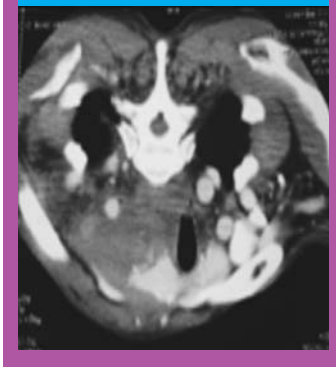

Fig. 4: CT scan showing extension of hematoma

Emergency neck exploration and hematoma evacuation was planned after oro-tracheal intubation. Skin incision was given from one mastoid tip to another through middle part of the neck and deepened to subplatysmal layer. Dissection continued with exposure of submandibular, carotid, posterior triangle and parapharyngeal space. Hematoma was evacuated from deep neck spaces. Intramuscular hemorrhage was noticed in strap and sternocleidomastoid muscles. After removing the hematoma from posterior aspect of left thyroid lobe, active bleeding was seen from left inferior thyroid artery which was ligated. Tracheostomy was accomplished at the end of procedure to secure the airway. Hospital stay was uneventful. The patient was discharged on 7th post operative day. At the time of discharge no bleeding, dysnoea or dysphagia was seen.

DISCUSSION:

Spontaneous neck hematoma is a rare entity. Classical triad of tracheal and esophageal compression, lateral tracheal displacement and neck swelling is seen in progressive type of hematoma that lasts longer. Tracheal compression was not seen in this case because of early intervention. Literature review of 16 cases of spontaneous neck

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hematoma due to rupture of inferior thyroid artery revealed more than 50% cases were above 60 years of age and all were above 42 years of age.[3] Apart from trauma and tumor related bleeding, aneurysm of thyroid vessel is seen in majority of neck hematoma. Aneurysm of the inferior thyroid artery, although rare, is the most common site for aneurysm of the thyrocervical system.[4] Unnoticed aneurysm also could be the possibility in this case.Valsalva maneuver increases both intra-abdominal and intra-thoracic pressure. Rupture of small vessels due to a repetitive valsalva maneuver have been anecdotically described in the literature with a susceptibility to cerebral vessels. Patient denied repeated valsalva in this case. Angiography can clinch the site of bleeding and also gives a advantage of embolization in the same setting but this facility is lacking in most of hospital including ours. Securing the airway is the most important job before accomplishing the diagnostic procedures. For stable patient and stable hematoma, wait and watch policy is the best even in mediastinal haematoma.[5] But in this case it was progressively increasing and the condition was gradually deteriorating, so, immediate exploration was the best option. Two mortality has been mentioned in spontaneous neck haematoma who were only observed without exploration. Stenner et al[3] emphasized the use of liberal incision for exploration of whole hematoma after mobilizing the adjacent structures. Tracheostomy is not mandatory if intubation is possible but it will be always safe where cause of bleeding is unknown.[6]

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